BELLCOMM, INC.

SUBJECT: Trip Report - TRW Final Presentation
AAP Prelaunch Operations Analysis
Case 600-3

DATE: October 4, 1967

FROM: A. W. Starkey

MEMORANDUM FOR FILE

The final presentation of the AAP Prelaunch Operations Analysis performed under KSC Contract NAS 10-4466 was made at KSC by the TRW Project Manager on September 26, 1967. Representatives of MLO, MLR and MLT were in attendance.

This study effort included the mission analysis, program requirement, experiment analysis, Launch Complex performance specifications and experiment and experiment carrier checkout analysis for AAP missions 1A, 1, 2, 3 and 4.

The objectives of the analysis were to develop optimum modes of operation for checkout of AAP space vehicles at KSC and to determine the impact of these operations on KSC facilities, GSE/ESE ground instrumentation, automatic checkout systems and procedures.

The major guidelines used in the analysis were (1) AAP should not impact Apollo schedules or costs while making maximum use of Apollo facilities, (2) operations are success oriented, (3) integrated testing of experiments and carriers is accomplished prior to KSC, (4) Apollo flight hardware assigned to AAP is modified as required for AAP at KSC and (5) the AM and MDA will be mated for the first time at KSC. It is generally agreed that the last two assumptions are no longer valid; however, since they have not been changed officially, TRW efforts were not redirected.

TRW concluded that (1) the requirements for the first five AAP missions can be generally met with existing Apollo resources; however, significant facility and equipment modifications are required and (2) one modified ACE/SC station can support the LM-ATM checkout. A total of five ACE-S/C stations will be adequate for both Apollo and AAP at KSC during 1968 and six will be required during 1969.

It was generally agreed that TRW did a thorough analysis as specified by this work statement; however, follow-on study effort is required. KSC plans to continue this work as soon as they can get an AAP support contractor on board. It appears that this study effort supplements to a degree the efforts of the AAP Test Definition and Planning Group; however, this is desirable since problems identified in the TD&PG can be studied in detail by the support contractor.

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